

Taysha

2. Complete the chart

Figure	Number of Squares
1	5
2	7
3	9
4	11
5	13

3. In a few sentences, describe what the 10th figure would look like.

$$5 + 2 \times 10 - 2 = 23$$

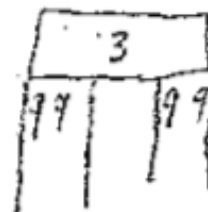
$$10 \times 2 + 3 = 23$$



4. Explain how you would figure out the number of squares in the 99th figure.

$$5 + 2 \times 99 - 2 = 201$$

$$99 \times 2 + 3 = 201$$



5. In a few sentences, write a way to describe how to figure out how many squares are in any stage of the pattern.

has 3 boxes across and
 Figure 1 has one box on each side going down
 Figure 2 and so on only adds one on each side
 So the pattern is 2 more boxes per figure.
 Multiply the number Figure by 2 and add 3.

Example $\overset{\text{Figure}}{10} \times 2 + 3 = \overset{\text{Squares}}{23}$

Bonus Question

6. Which figure will have 175 squares in it?

$$175 - 3 \div 2 = 86$$

$$175 - 3 = 172 \div 2 = 86$$

→ $86 \times 2 + 3 = 175$

Paula

2. Complete the chart

Figure	Number of Squares
1	5
2	7
3	9
4	11
5	13

3. In a few sentences, describe what the 10th figure would look like.

6 - 15 squares
7 - 17 squares
8 - 19 squares
9 - 21 squares
10 - 23 squares

4. Explain how you would figure out the number of squares in the 99th figure.

5. In a few sentences, write a way to describe how to figure out how many squares are in any stage of the pattern.

In each figure you add it
by 2.

****Bonus Question****

6. Which figure will have 175 squares in it?

Robin

Figure	Number of Squares
1	4
2	7
3	9
4	13
5	17

3. In a few sentences, describe what the 10th figure would look like.

3 boxes across the top.
10 boxes down on both sides
(23 boxes).

4. Explain how you would figure out the number of squares in the 99th figure.

~~3 boxes across the top.~~
~~48 boxes on each side~~

~~99 - 3 = 96~~

~~96 ÷ 2 = 48~~

side side

~~48 + 48 + 3~~

99 × 2 = 198
198 + 3 = 201

101
2
99

1	2	3
99		99

3 boxes on top
49 + 49 + 3
53 = 53

5. In a few sentences, write a way to describe how to figure out how many squares are in any stage of the pattern.

Multiply each number by 2.
add 3, ~~and then divide by 2.~~
OR simply write the number
around evenly on both sides and
add by three.

1	2	3
28		28

Bonus Question

6. Which figure will have 175 squares in it?

~~175~~ - 3 = 172



86 figure

172 ~~is~~ - SIDES

175 - x = 172

175 - x ÷ 2 = 86